

Figure 21 shows the copper wire screen being installed on the sun porch of the house. All frames were hand made. This applies to many of the doors in both dwelling and service building, as well as all window screen frames.



July
year 1939

Figure 21

All of the above-mentioned development activities were carried on by WPA assisted by limited NYA labor; and a good deal of the log work on the service building and certain farming activities were executed by grant labor provided by the Farm Security Administration.

BENTON LAKE

During this fiscal year we had unusually heavy wind storms in the vicinity of Benton Lake, which caused Russian thistles to pile in along the fence. During one particular day and night we lost over five miles of fence, which had to be rebuilt. In addition, certain parts of the fence on the south side of the refuge were drifted in with soil, which had to be shovelled out. Most of this repair work was done by Leon C. Snyder, under regular funds. However, he did have some assistance in the latter part of the fiscal year under WPA.

Funds of Government

The regular funds provided to this district have been mainly used relative to supervision, gas, and oil, and other incidental expenses; with the exception of some labor which was used relative to the headquarters and most of the materials needed for the house on Niznipe. Farming equipment and new trucks are also being purchased by the Washington Office.

I have been very much pleased with the manner in which Snyder has taken hold of his job. He had considerable to become acquainted with. He is doing a first class job and getting better acquainted with his duties, and does not hesitate to exert himself. Appreciation is also expressed to the fine cooperation received from our WPA workers as well as the invaluable

assistance of Stephen R. Bennett, project foreman; Henry Jensen, carpenter-foreman; Cleono Gentry and Laura Cisney, stenographers. Edwin Cisney has also helped considerably, relative to field data.

All in all, much of the work we have accomplished this year would not have been possible without the excellent cooperation received from the above-mentioned individuals. It should also be mentioned that the Billings office, along with Birger Owens, their representative on Pishkun, and Mr. Paterson, the carpenter-foreman, have particularly done a fine job on Pishkun. Mr. Snyder has also worked along with the project for that refuge.

VI. SCIENTIFIC PROGRESS

As heretofore stated, a comprehensive nesting study was presented during this fiscal year for Ninepipe and Pablo. Our type map study for Pablo is now practically complete and the refuge manager has been working on information relative to a paper which will be entitled "The Management of the Mallard in Flathead Valley and Contributions to its Life History." We have also been obtaining data on management of the Chinese pheasant, with a similar paper in mind. Mr. Edwin Cisney's assistance in connection with these studies has been invaluable. None of them as yet are ready to write or to present to the Bureau for its approval, but sometime this fall I should have the desired information which has been accumulating over a period of three years. I will not attempt to summarize the results of any of these studies and in connection with the nesting study, it is too comprehensive to simmer down, but is on file in the Washington office.

VII. LAW ENFORCEMENT

The following apprehensions have been made relative to law enforcement:

1. Mr. R. S. Andrews, R.F.D. 1, Box 75, Missoula, Montana; on Kickinghorse Reservoir October 15, 1938, was using a shotgun improperly plugged. Case not prosecuted.
2. Robert L. Pedderson, Polson, Montana; hunting without a license at Reservoir Valley. No complaint was filed as he was under age. October 20, 1938.
3. Mr. Joe H. Papke, Polson, Montana; hunting south of Pablo Refuge on October 28, 1938, without a Migratory Bird Hunting Stamp. He was fined \$10.00.
4. Mr. Dwight H. Mason, Jr., 640 Brook St., Missoula, Montana; hunting within the boundary of Pablo Refuge on October 30, 1938. Apparently not prosecuted by the Bureau.
5. Mr. Vurley White, Somers, Montana; shot a Chinese pheasant cock from the Public Highway near Pablo Reservoir, October 30, 1938. He was fined \$25.00.

second Quarterly Report, Fiscal Year 1939

S.E.C.O. 3 QUARTERLY REPORT, FISCAL YEAR 1939
FOR WILLOW CREEK, PABLO, FISHER, WILLOW CREEK, BENTON LAKE

George L. Girard
Roman, Montana

WEATHER CONDITIONS

— Weather Conditions

The months of August, September, and October on Minnepipe, Pablo, Fish Lake, Willow Creek, and Benton Lake Refuges would be considered perhaps the dry season of the year; however, in October Minnepipe and Pablo had several fine rains. Benton Lake, Willow Creek, and Fish Lake had a few small rains in September and October, and quite a heavy snow in October, but none of which were sufficient to add a water supply to Benton Lake Refuge. Relative to water conditions, Willow Creek has had a larger supply during this quarter than at any other period during the last two years. The Reclamation Service did not draw off water during the entire summer. The potatoes in the northwest and western portions of the refuge will receive a new supply of water due to the gradual increase in the water level of the reservoir. Excellent cooperation from the Reclamation Service relative to Minnepipe and Pablo, can be reported. A letter was written to Mr. Guy Sperry, Project Engineer for the Flathead Irrigation District, asking if he could cooperate in maintaining a larger supply of water in the reservoirs this fall than was left the previous falls. He complied, and both reservoirs have a good supply of water. His cooperation in this matter meant considerably to our migratory waterfowl.

The artificial ponds built on Pablo have done much to improve the water supply of that refuge as illustrated in figures I and II. They already are used extensively by ducks and geese and are increasing the population of ducks on that refuge. Figure II contains an artificial resting island.



Fig. I

I. INFORMATION RELATIVE TO THE SPECIES OF WILDLIFE.

As a matter of giving indicative information and a summary, relative to numbers of migratory waterfowl using the refuges in this district for this fiscal year, I will include representative observations from time to time throughout the year. On July 26, on Pablo, I estimated more than 3,000 young ducks and about the same number of adults. The refuge also had about 350 geese on it. On July 28, more than 1,500 young ducks and about 2,000 adults as well as 35 geese were seen on Ninepipe Refuge. On August 4, there were about 3,500 young ducks and about 3,500 adults, as well as 300 geese on Pablo. Baird sandpipers, northern phalaropes, greater yellow legs, avocets and gulls were also present. On August 9, there were about 1,800 geese and about 6,000 ducks, as well as 30 greater yellow legs, 100 spotted sandpipers, 20 great blue heron, five avocets, and numerous least sandpipers, on Pablo. On August 10, seven western willet were seen on Pablo, a new bird for that refuge. On August 27 on Pablo there were about 1,000 geese and 8,000 ducks.

On August 11 on Ninepipe there were 700 geese, 25 western willet, a new bird for the refuge, one great marbled godwit, a new bird for the refuge, 100 black or sooty tern, 25 greater yellow legs, two lesser yellow legs, about 7,500 ducks, including redheads and ruddy ducks. I had noted on August 11 that about six northern phalarope had been on the same pothole for about a week. There were also six spotted sandpipers on the refuge on that day as well as 200 gulls.

On August 17, I saw 32 mallards on Benton Lake and an avocet, a new bird to that refuge. There were also 12 marsh hawks on Benton Lake on the same day.

On August 18 on Willow Creek I saw about 5,000 ducks, 12 pelican, 12 great blue heron, one curlew, seven solitary sandpiper, 45 Baird and least sandpipers, 30 northern phalarope, two avocets, three greater yellow legs, five lesser yellow legs, one spotted sandpiper, 150 coots, as well as western, horned and eared grebes. Lack of sun made it impossible to properly identify the ducks.

On September 6, on Pablo, there were 25 Great Blue Heron, nine least sandpipers, three greater American bittern, 30 American goldeneyes, 1,000 Canadian geese, 3,500 ducks, mainly mallards; but pintails, shovellers, blue-winged teal, green-winged teal, redheads, as well as gadwalls, and baldpates were represented. In the afternoon of the same day I counted an additional thousand geese. I should add that on that same day killdeer were still using the refuge. On September 10 on Pablo, I saw about 200 Baird sandpipers, and both least and semi-palmated sandpipers, were present, 1,300 Canadian geese, 75 american mergansers, 22 great blue heron, 8,000 ducks as well as 300 gulls.

On September 21 on Willow Creek I saw five pheasants, nine Hungarian partridges, 350 redheads, 141 ruddy ducks. The redheads and ruddy ducks were in one bunch and were an extremely beautiful sight. There were also about 12 pied-billed grebe, seven horned grebe, 14 eared grebe, 300 coots, 52 great blue heron, 425 mallards, 250 pintails, 600 baldpates, 500 gadwalls, 22 green-winged teal, 30 blue-winged teal, 75 gulls, two pelican, ten canvas back, 51 lesser scaup, 60 shovellers, and about 500 that I could not identify due to the position of the sun.